

AMENDMENTS TO THE CLAIMS

Please cancel Claims 79-109 without prejudice or disclaimer of subject matter.

Please amend Claims 1, 21, 39, and 59 to read as follows.

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1. (Currently Amended) A method of manufacturing an image displaying apparatus, comprising the steps of:
 - a: preparing a first substrate on which phosphor exciting means is disposed and a second substrate on which phosphors emitting light by said phosphor exciting means is disposed under the vacuum atmosphere;
 - b: carrying one or both of said first and second substrates into a getter processing chamber in the vacuum atmosphere under the vacuum atmosphere, and subjecting to getter processing said one substrate carried, or one or both of said substrates carried; and
 - c: carrying said first and second substrates into a seal processing chamber in the vacuum atmosphere under the vacuum atmosphere, and heat sealing said substrates in an opposing state,

wherein each processing chamber is evacuated into 10^{-4} Pa or more lower pressure.

2. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said steps a, b and c are steps set on one line.

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3. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said steps a, b and c are steps set on one line, and a heat shielding member is disposed between said getter processing chamber and said seal processing chamber.

4. (Original) A method of manufacturing an image displaying apparatus according to claim 3, wherein said heat shielding member is formed of reflective metal.

5. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said steps a, b and c are steps set on one line, and a load lock is disposed between said getter processing chamber and said seal processing chamber.

6. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said steps a, b and c are steps set on a star arrangement.

7. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said steps a, b and c are steps set on a star arrangement, and said getter processing chamber and said seal processing chamber are partitioned by an independent chamber.

8. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said phosphor exciting means has electron beam emitting means.

9. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said first substrate has an envelope fixedly disposed around said first substrate in advance.

10. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said first substrate has a spacer fixedly disposed inside said first substrate in advance.

11. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said first substrate has an envelope fixedly disposed around said first substrate and a spacer fixedly disposed inside said first substrate.

12. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said second substrate has an envelope fixedly disposed around said second substrate in advance.

13. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said second substrate has a spacer fixedly disposed inside said second substrate in advance.

14. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said second substrate has an envelope fixedly disposed around said second substrate and a spacer fixedly disposed inside said first substrate.

15. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said getter used in the step b is an evaporation type getter.

16. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said evaporation type getter is a barium getter.

17. (Original) A method of manufacturing an image displaying apparatus according to claim 1, wherein said sealing material used in the step c is a low melting point material.

18. (Original) A method of manufacturing an image displaying apparatus according to claim 17, wherein said low melting point material is a low melting point metal or an alloy of such a metal.

19. (Original) A method of manufacturing an image displaying apparatus according to claim 18, wherein said low melting point metal is indium or an alloy of indium.

20. (Original) A method of manufacturing an image displaying apparatus according to claim 17, wherein said low melting point material is frit glass.

21. (Currently Amended) A method of manufacturing an image displaying apparatus, comprising the steps of:

a: preparing a first substrate on which phosphor exciting means is disposed and a second substrate on which phosphors emitting light by said phosphor exciting means is disposed under the vacuum atmosphere;

b: carrying said first and second substrates into a bake processing chamber in the vacuum atmosphere under the vacuum atmosphere and subjecting to bake processing both said substrates at predetermined temperature; and

c: carrying said first and second substrates into a seal processing chamber in the vacuum atmosphere under the vacuum atmosphere, and heat sealing said substrates in an opposing state,

wherein each processing chamber is evacuated into 10^{-4} Pa or more lower pressure.

22. (Original) A method of manufacturing an image displaying apparatus according to claim 21, wherein said steps a, b and c are steps set on one line.

23. (Original) A method of manufacturing an image displaying apparatus according to claim 21, wherein said steps a, b and c are steps set on one line, and a heat shielding member is disposed between said bake processing chamber and said seal processing chamber.

24. (Original) A method of manufacturing an image displaying apparatus according to claim 23, wherein said heat shielding member is formed of reflective metal.

25. (Original) A method of manufacturing an image displaying apparatus according to claim 21, wherein said steps a, b and c are steps set on one line, and a load lock is disposed between said bake processing chamber and said seal processing chamber.

26. (Original) A method of manufacturing an image displaying apparatus according to claim 21, wherein said steps a, b and c are steps set on a star arrangement.

27. (Original) A method of manufacturing an image displaying apparatus according to claim 21, wherein said steps a, b and c are steps set on a star arrangement, and said bake processing chamber and said seal processing chamber are partitioned by an independent chamber.

28. (Original) A method of manufacturing an image displaying apparatus according to claim 21, wherein said phosphor exciting means has electron beam emitting means.

29. (Original) A method of manufacturing an image displaying apparatus according to claim 21, wherein said first substrate has an envelope fixedly disposed around said first substrate in advance.

30. (Original) A method of manufacturing an image displaying apparatus according to claim 21, wherein said first substrate has a spacer fixedly disposed inside said first substrate in advance.

31. (Original) A method of manufacturing an image displaying apparatus according to claim 21, wherein said first substrate has an envelope fixedly disposed around said first substrate and a spacer fixedly disposed inside said first substrate.

32. (Original) A method of manufacturing an image displaying apparatus according to claim 21, wherein said second substrate has an envelope fixedly disposed around said second substrate in advance.

33. (Original) A method of manufacturing an image displaying apparatus according to claim 21, wherein said second substrate has a spacer fixedly disposed inside said second substrate in advance.

34. (Original) A method of manufacturing an image displaying apparatus according to claim 21, wherein said second substrate has an envelope fixedly disposed around said second substrate and a spacer fixedly disposed inside said first substrate.

35. (Original) A method of manufacturing an image displaying apparatus according to claim 21, wherein said sealing material used in the step c is a low melting point material.

36. (Original) A method of manufacturing an image displaying apparatus according to claim 35, wherein said low melting point material is a low melting point metal or an alloy of such a metal.

37. (Original) A method of manufacturing an image displaying apparatus according to claim 36, wherein said low melting point metal is indium or an alloy of indium.

38. (Original) A method of manufacturing an image displaying apparatus according to claim 35, wherein said low melting point material is frit glass.

39. (Currently Amended) A method of manufacturing an image displaying apparatus, comprising the steps of:

- a: preparing a first substrate on which phosphor exciting means is disposed and a second substrate on which phosphors emitting light by said phosphor exciting means is provided under the vacuum atmosphere;
- b: carrying said first and second substrates into a bake processing chamber in the vacuum atmosphere under the vacuum atmosphere and subjecting to bake processing both said substrates at predetermined temperature;
- c: carrying one or both of said first and second substrates into a getter processing chamber in the vacuum atmosphere under the vacuum atmosphere, and subjecting to getter processing said one substrate carried or one or both of said substrates carried; and
- d: carrying said first and second substrates into a seal processing chamber in the vacuum atmosphere under the vacuum atmosphere, and heat sealing said substrates in an opposing state,

wherein each processing chamber is evacuated into 10^{-4} Pa or more lower pressure.

40. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said steps a, b, c and d are steps set on one line.

41. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein the steps a, b, c and d are steps set on one line, and a heat shielding member is disposed between said bake processing chamber and said getter processing chamber, between said bake processing chamber and said seal processing chamber, or between said bake processing chamber, said getter processing chamber and said seal processing chamber, respectively.

42. (Original) A method of manufacturing an image displaying apparatus according to claim 41, wherein said heat shielding member is formed of a reflective metal.

43. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein the steps a, b, c and d are steps set on one line, and a load lock is disposed said bake processing chamber and said getter processing chamber, between said bake processing chamber and said seal processing chamber, or between said bake processing chamber, said getter processing chamber and said seal processing chamber, respectively.

44. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein the steps a, b, c and d are steps set on a star arrangement.

45. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein the steps a, b, c and d are arranged on a star arrangement,

and said bake processing chamber, said getter processing chamber and said seal processing chamber are partitioned by an independent chamber.

46. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said phosphor exciting means has electron beam emitting means.

47. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said first substrate has an envelope fixedly disposed around said first substrate in advance.

48. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said first substrate has a spacer fixedly disposed inside said first substrate in advance.

49. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said first substrate has an envelope fixedly disposed around said first substrate and a spacer fixedly disposed inside said first substrate.

50. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said second substrate has an envelope fixedly disposed around said second substrate in advance.

51. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said second substrate has a spacer fixedly disposed inside said second substrate in advance.

52. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said second substrate has an envelope fixedly disposed around said second substrate and a spacer fixedly disposed inside said first substrate.

53. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said getter used in the step b is an evaporation type getter.

54. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said evaporation type getter is a barium getter.

55. (Original) A method of manufacturing an image displaying apparatus according to claim 39, wherein said sealing material used in the step c is a low melting point material.

56. (Original) A method of manufacturing an image displaying apparatus according to claim 55, wherein said low melting point material is a low melting point metal or an alloy of such a metal.

57. (Original) A method of manufacturing an image displaying apparatus according to claim 56, wherein said low melting point metal is indium or an alloy of indium.

58. (Original) A method of manufacturing an image displaying apparatus according to claim 55, wherein said low melting point material is frit glass.

59. (Currently Amended) A method of manufacturing an image displaying apparatus, comprising the steps of:

a: preparing a first substrate on which phosphor exciting means is disposed and a second substrate on which phosphors emitting light by said phosphor exciting means is disposed under the vacuum atmosphere;

b: carrying said first and second substrates into a bake processing chamber in the vacuum atmosphere under the vacuum atmosphere and subjecting to bake processing both said substrates at predetermined temperature;

c: carrying one or both of said first and second substrates into a first getter processing chamber in the vacuum atmosphere under the vacuum atmosphere, and subjecting to first getter processing said one substrate carried or one or both of said substrates carried;

d: carrying one or both of said first and second substrates into an electron beam clean processing chamber in the vacuum atmosphere under the vacuum atmosphere, and subjecting to electron beam clean processing said one substrate carried or one or both of said substrates carried;

e: carrying one or both of said first and second substrates into a second getter processing chamber in the vacuum atmosphere under the vacuum atmosphere, and subjecting to second getter processing said one substrate carried or one or both of said substrates carried; and

f: carrying said first and second substrates into a seal processing chamber in the vacuum atmosphere under the vacuum atmosphere, and heat sealing said substrates in an opposing state,

wherein each processing chamber is evacuated into 10^{-4} Pa or more lower pressure.

60. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said steps a, b, c, d, e and f are steps set on one line.

61. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein the steps a, b, c, d, e and f are steps set on one line, and a heat shielding member is disposed between said bake processing chamber and said first getter processing chamber, between said first getter processing chamber and said electron beam clean processing chamber, between said electron beam clean processing chamber and said second getter processing chamber, or between said second getter processing chamber and said seal processing chamber.

62. (Original) A method of manufacturing an image displaying apparatus according to claim 61, wherein said heat shielding member is formed of a reflective metal.

63. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein the steps a, b, c, d, e and f are steps set on one line, and a load lock is disposed between said bake processing chamber and said first getter processing chamber, between said first getter processing chamber and said electron beam clean processing chamber, between said electron beam clean processing chamber and said second getter processing chamber, or between said second getter processing chamber and said seal processing chamber.

64. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein the steps a, b, c, d, e and f are set on a star arrangement.

65. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein the steps a, b, c, d, e and f are set on a star arrangement, and said bake processing chamber, said first getter processing chamber, said electron beam clean processing chamber, said second getter processing chamber and said seal processing chamber are partitioned by independent chambers.

66. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said phosphor exciting means has electron beam emitting means.

67. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said first substrate has an envelope fixedly disposed around said first substrate in advance.

68. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said first substrate has a spacer fixedly disposed inside said first substrate in advance.

69. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said first substrate has an envelope fixedly disposed around said first substrate and a spacer fixedly disposed inside said first substrate.

70. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said second substrate has an envelope fixedly disposed around said second substrate in advance.

71. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said second substrate has a spacer fixedly disposed inside said second substrate in advance.

72. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said second substrate has an envelope fixedly disposed around said second substrate and a spacer fixedly disposed inside said first substrate.

73. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said getter used in the steps b and d is an evaporation type getter.

74. (Original) A method of manufacturing an image displaying apparatus according to claim 73, wherein said evaporation type getter is a barium getter.

75. (Original) A method of manufacturing an image displaying apparatus according to claim 59, wherein said sealing material used in the step e is a low melting point material.

76. (Original) A method of manufacturing an image displaying apparatus according to claim 75, wherein said low melting point material is a low melting point metal or an alloy of such a metal.

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77. (Original) A method of manufacturing an image displaying apparatus according to claim 76, wherein said low melting point metal is indium or an alloy of indium.

78. (Original) A method of manufacturing an image displaying apparatus according to claim 75, wherein said low melting point material is frit glass.

79. - 109. (Cancelled)
